



February 27, 2013

Stephanie Vaughn, Project Manager
USEPA Region 2
290 Broadway, 19th Floor
New York, New York 10007

Subject: ***February 2013 Background Benthic Sediment Environmental Data Submission
Lower Passaic River Study Area (LPRSA)
Remedial Investigation/Feasibility Study (RI/FS)
CERCLA Docket No. 02-2007-2009***

Dear Ms. Vaughn:

Enclosed please find an electronic data submittal for validated Fall 2012 background benthic sediment sampling activities associated with the February 2013 Monthly Progress Report of the Lower Passaic River (LPRSA) Remedial Investigation/Feasibility Study (RI/FS). Data in this submittal include validated field sample results and associated laboratory QC results.

The validated data zip archive file comprising this deliverable (LPR20130222.NJD980528996.zip) contains the following individual text files:

- ☐ LPR20130222.NJD980528996.Batch_v3
- ☐ LPR20130222.NJD980528996.DataProvider_v3
- ☐ LPR20130222.NJD980528996.Location_v3
- ☐ LPR20130222.NJD980528996.Sample_v3
- ☐ LPR20130222.NJD980528996.Site_v3
- ☐ LPR20130222.NJD980528996.TestResultQC_v3

In addition, you will also find a zip file with preliminary unvalidated laboratory EDDs received since the January progress report. Unvalidated data included in this submittal are in the form of raw Electronic Data Deliverables (EDDs) from the following laboratories: Alpha Analytical, SGS (former Analytical Perspectives), Brooks Rand Laboratories, ALS (former Columbia Analytical Services - Kelso, WA) and Maxxam Analytics. Since ddms is still working with laboratories to secure final EDDs, these laboratory EDDs are provided as-is. Final data will be submitted after data validation. Please note the following known issues/qualifications associated with these raw EDDs:

- ☐ EDDs were submitted to ddms by laboratories using the EPA Region 2 MEDD format but should not be considered final MEDD deliverables to EPA.
- ☐ Final MEDDs will be submitted after data validation updates are applied with a complete list values to be added to the EPA Region 2 MEDD reference value list and explanation of any remaining errors identified by the Electronic Data Processor (EDP) EDD checking software.

LPRSA RI/FS
Background Benthic Sediment Sampling
Data Submittal
2/27/2013

Unvalidated data are subject to revision pending EDD re-submittal from laboratories and data validation.

If you have any questions regarding this data submittal please contact me at 651-842-4232 or mkill@ddmsinc.com.

Sincerely,

de maximis Data Management Solutions, Inc.

A handwritten signature in black ink that reads "Mark D. Kill". The signature is fluid and cursive, with the first name "Mark" and last name "Kill" being clearly legible.

Mark D. Kill
CPG Data Manager

/mdk

Attachment: Zip file with validated results MEDD and a zip file with unvalidated laboratory EDDs

cc: Bill Potter – *de maximis, inc.*
Rob Law – *de maximis, inc.*

LPRSA RI/FS
Background Benthic Sediment Sampling
Data Submittal
2/27/2013



The following is a list of reference values to be added to the EPA database.

Table	Column	Value	Description
TestResultQC_v3.txt	cas_rn	36643-28-4	Tributyltin
TestResultQC_v3.txt	cas_rn	12789-03-6	gamma-Chlordane
TestResultQC_v3.txt	cas_rn	%19-75MM	% Coarse Gravel(19-75MM)
TestResultQC_v3.txt	cas_rn	%>75.0MM	% Cobbles(>75.0MM)
TestResultQC_v3.txt	cas_rn	%4.75-19MM	% Fine Gravel(4.75-19MM)
TestResultQC_v3.txt	cas_rn	%4.75-75MM	% Total Gravel(4.75-75MM)
TestResultQC_v3.txt	cas_rn	%2.0-4.75MM	% Coarse Sand(2.0-4.75MM)
TestResultQC_v3.txt	cas_rn	%0-0.0039MM	% Fine Clay(0-0.0039MM)
TestResultQC_v3.txt	cas_rn	%0.0039-0.075MM	% Fine Silt(0.0039-0.075MM)
TestResultQC_v3.txt	cas_rn	%0-0.075MM	% Total Fines(0-0.075MM)
TestResultQC_v3.txt	cas_rn	%0.425-2.0MM	% Medium Sand(0.425-2.0MM)
TestResultQC_v3.txt	cas_rn	%0.075-0.425MM	% Fine Sand(0.075-0.425MM)
TestResultQC_v3.txt	cas_rn	%0.075-4.75MM	% Total Sand(0.075-4.75MM)
TestResultQC_v3.txt	cas_rn	215587/53703	Dibenz(a,c+a,h)anthracene
TestResultQC_v3.txt	cas_rn	205823/207089	Benzo(j,k)fluoranthene
Batch_v3.txt, TestResultQC_v3.txt	lab_anl_method_name	E1668C	EPA Method 1668, Revision C, Chlorinated Biphenyl Congeners in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS
Batch_v3.txt, TestResultQC_v3.txt	lab_anl_method_name	SW9012B	Total Cyanide Revision B
Batch_v3.txt, TestResultQC_v3.txt	lab_anl_method_name	SW8270D	SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MA SS SPECTROMETRY (GC/MS) Revision D
Batch_v3.txt, TestResultQC_v3.txt	lab_anl_method_name	SW8082A	PCBs by Gas Chromatography Revision A
Batch_v3.txt, TestResultQC_v3.txt	lab_anl_method_name	NJEPH	New Jersey DEP method for Extractable Petroleum Hydrocarbons
Batch_v3.txt, TestResultQC_v3.txt	lab_name_code	SW8270D SIM	SEMI-VOLITILE ORGANIC COMPOUNDS BY SELECTIVE ION METHOD
TestResultQC_v3.txt	prep_method	SW3546	Microwave Extraction

Table	Column	Value	Description
Batch_v3.txt, TestResultQC_v3.txt	test_type	INIT-UH	Test results were reported for a single sediment sample in both homogenized and un-homogenized states. In order to report multiple results for the same sample/method/analyte a new test type was added to meet primary key requirements for un-homogenized sediment: INIT-UH. Homogenized sediment reported with the test_type of 'initial'.

The following errors generated by the EDP EDD checking software are not actually errors:

Table	Column	Error	Description
Location_v3.txt	alt_identifier	Missing required field	This field is not required in the schema. Documentation of the MEDD format says to leave blank
Sample_v3.txt	sys_sample_code	Sys_sample_code must be unique and cannot equal sys_loc_code.	Sample ID and location ID are the same for the benthic sediment grab samples. Although MEDD business rules flag this as an error, the nature of the sediment grab samples make it impossible for multiple samples to be taken from the same location. Therefore changes to the field sample IDs for differentiation from location IDs were not performed.

Table	Column	Error	Description
TestResultQC_v3.txt	detect_flag	Result_value is required where detect_flag=Y.	This error message exists in cases of co-eluting PCB congeners. Each PCB congener result is being stored as a separate record in the CPG database. In cases of co-elutions, per EPA request, only the congener with the lowest IUPAC number receives a result value. Both records receive a qualifier of "C" plus the IUPAC number of the lowest number congener in the co-elution to indicate the linkage between the two result records.
TestResultQC_v3.txt	lab qualifiers, interpreted_qualifiers	Invalid Qualifier, Value Exceeds Field Length	Field contains original laboratory qualifiers. Lab qualifiers were transferred to interpreted_qualifiers field for lab QC data which does not receive validation.
TestResultQC_v3.txt	validator_qualifiers	Missing required field	Records were validated (Validated_yn = "Y") but were not qualified by the validator, therefore validator_qualifier should be left as null.
TestResultQC_v3	Total_or_dissolved	Value exceeds field length	EPA/CDMSmith instructions were to use this field to identify SEM fraction. Per the published LPR-specific reference value file (.rvf) supplied by CDMSmith "SE" was used to identify SEM.